

FIG. 1

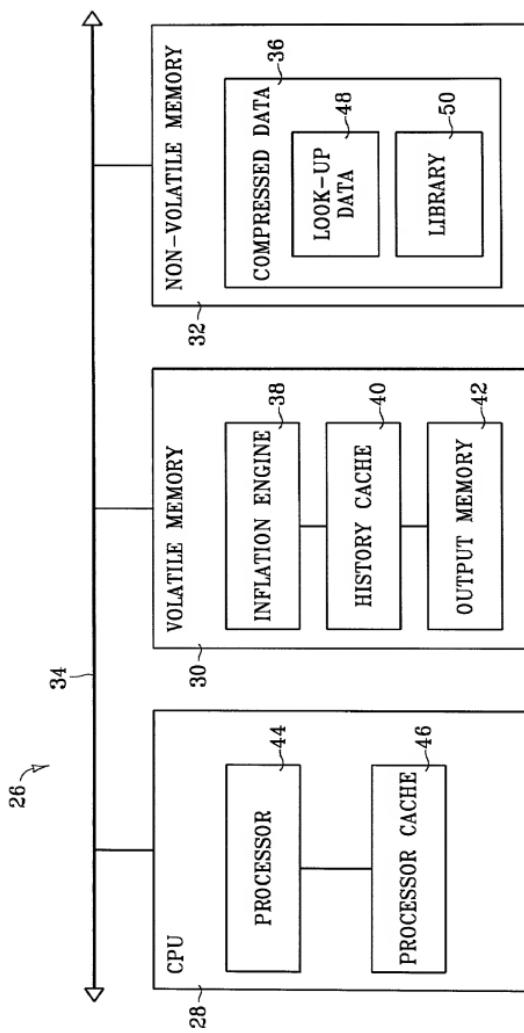


FIG. 2

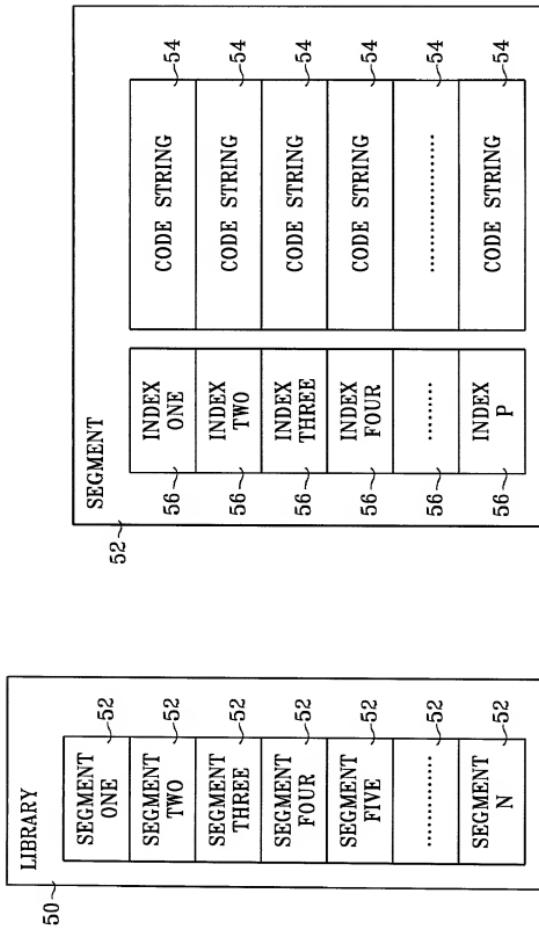


FIG. 3

FIG. 4

CODE STRING

BIT R	.....	BIT FOUR	BIT THREE	BIT TWO	BIT ONE
58	58	58	58	58	58

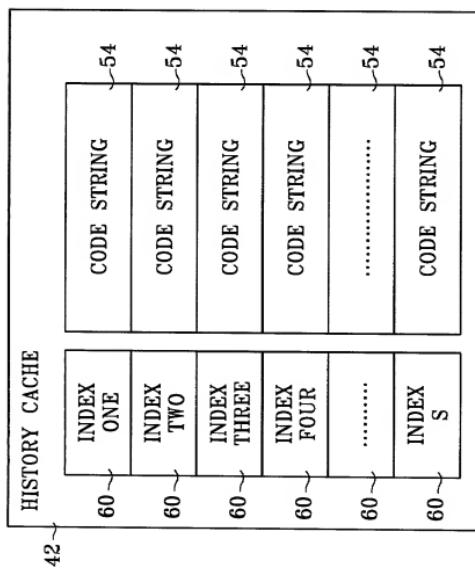
54 ~

FIG. 5

64 ~	LOOK-UP STRING ONE	~ 48
64 ~	LOOK-UP STRING TWO	
64 ~	LOOK-UP STRING THREE	
64 ~	.....	
64 ~	LOOK-UP STRING Q	

FIG. 7

FIG. 6



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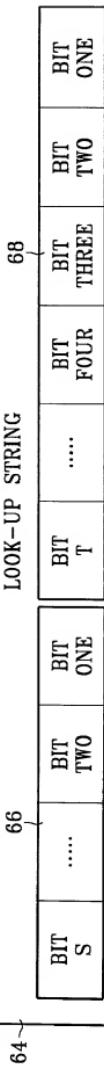


FIG. 8

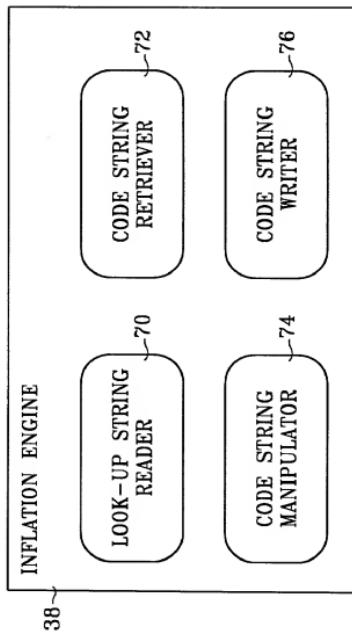


FIG. 9

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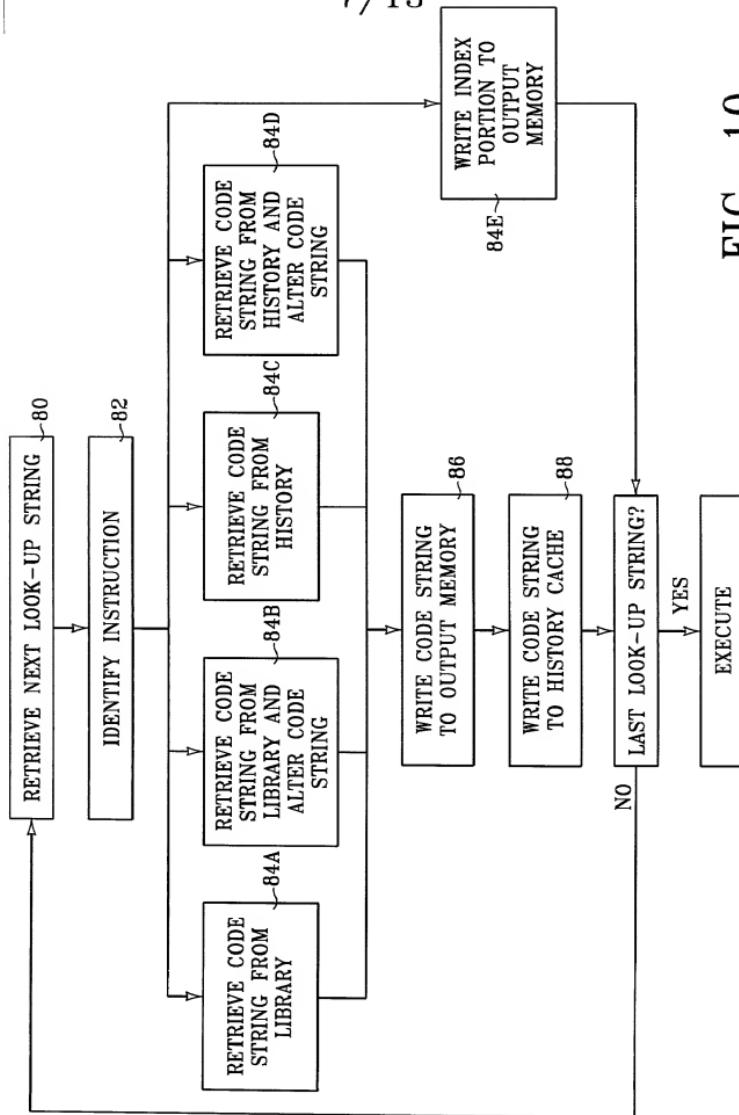


FIG. 10

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52~	SEGMENT 0000	16 INDEXED POSITIONS 4 BIT INDEX
52~	SEGMENT 0001	32 INDEXED POSITIONS 5 BIT INDEX
52~	SEGMENT 0010	64 INDEXED POSITIONS 6 BIT INDEX
52~	SEGMENT 0011	128 INDEXED POSITIONS 7 BIT INDEX
52~	SEGMENT 0100	256 INDEXED POSITIONS 8 BIT INDEX
52~	SEGMENT 0101	512 INDEXED POSITIONS 9 BIT INDEX
52~	SEGMENT 0110	1024 INDEXED POSITIONS 10 BIT INDEX
52~	SEGMENT 0111	2048 INDEXED POSITIONS 11 BIT INDEX
52~	SEGMENT 1000	4096 INDEXED POSITIONS 12 BIT INDEX
52~	SEGMENT 1001	8192 INDEXED POSITIONS 13 BIT INDEX

→ 50

FIG. 11

56~	0000	CODE STRING	54
56~	0001	CODE STRING	54
56~	0010	CODE STRING	54
56~	0011	CODE STRING	54
56~	0100	CODE STRING	54
56~	0101	CODE STRING	54
56~	0110	CODE STRING	54
56~	0111	CODE STRING	54
56~	1000	CODE STRING	54
56~	1001	CODE STRING	54
56~	1010	CODE STRING	54
56~	1011	CODE STRING	54
56~	1100	CODE STRING	54
56~	1101	CODE STRING	54
56~	1110	CODE STRING	54
56~	1111	CODE STRING	54

↑  
52 FIG. 12

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OPERATION	INSTRUCTION PORTION	LOOK-UP STRING INDEX PORTION	TOTAL BITS
<i>Library</i>	0000	0000 through 11111	8
<i>Retrieve/Write</i>	0000	000000 through 111111	9
<i>Library</i>	0000	0000000 through 1111111	10
<i>Retrieve/Write</i>	0000	00000000 through 11111111	11
<i>Library</i>	0000	000000000 through 111111111	12
<i>Retrieve/Write</i>	0000	0000000000 through 1111111111	13
<i>Library</i>	0000	00000000000 through 11111111111	14
<i>Retrieve/Write</i>	0000	000000000000 through 111111111111	15
<i>Library</i>	0000	0000000000000 through 1111111111111	16
<i>Retrieve/Write</i>	0000	00000000000000 through 11111111111111	17

FIG. 13

64		LOOK-UP STRING		68			
		INSTRUCTION PORTION		INDEX PORTION			
Operation							Total Bits
<u>Library</u>		1011	0000000000000000 through 1111111111111111	-plus-	Position	23	
-Retrieve-				00000 through 111111	Bit		
-Alter 1 BIT-							
-Write-							
<u>Library</u>		1100	0000000000000000 through 1111111111111111	-plus-	Position	26	
-Retrieve-				00000000 through 11111111	Byte		
-Alter S127-							
-Write-							
<u>Library</u>		1101	0000000000000000 through 1111111111111111	-plus-	Position	26	
-Retrieve-				00000000 through 11111111	Byte		
-Alter 1 BYTE-							
-Write-							
<u>Library</u>		11100	0000000000000000 through 1111111111111111	-plus-	Position	29	
-Retrieve-				00000 through 111111	Bit		
-Alter 2 BITS-							
-Write-							

FIG. 14

64		LOOK-UP STRING		68	
Operation	INSTRUCTION PORTION		INDEX PORTION		Total Bits
<u>History</u>		000000000000 through 111111111111			Position
-Retrieve-	11101	-plus-	000 through 111	Times Dup.	22
-Write-					
<u>History</u>		00000 through 11111		Times Dup.	10
-Retrieve-	11110				
-Duplicate-					
<u>History</u>		0000000000 through 111111111111		Position	24
-Retrieve-	11111	-plus-	00000 through 11111	Bit	
-Alter 1 Bit-					
-Write-					

FIG. 15A

		LOOK-UP STRING			
		INSTRUCTION PORTION	INDEX PORTION		
Operation		000000000000 through 111111111111		Total Bits	
<u>History</u>	11101	-plus-	000 through 111	Position	
-Retrieve-				Times Dup.	22
-Write-				Bit	
<u>History</u>	11111	000000000000 through 111111111111	-plus-	Position	
-Retrieve-			00000 through 11111	Bit	24
-Alter 1 BIT-				Bit	
-Write-				Bit	
<u>History</u>	111101	000000000000 through 111111111111	-plus-	Position	
-Retrieve-			00000 through 11111	Bit	30
-Alter 2 BITS-			-plus-	Bit	
-Write-			00000 through 11111	Bit	

FIG. 15B